



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2018-0399; Product Identifier 2018-NM-008-AD;

Amendment 39-19412; AD 2018-19-12]

RIN 2120-AA64

Airworthiness Directives; Bombardier, Inc., Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are superseding Airworthiness Directive (AD) 2015-17-04, which applied to certain Bombardier, Inc., Model CL-600-2C10 (Regional Jet Series 700, 701, & 702), Model CL-600-2D15 (Regional Jet Series 705), and Model CL-600-2D24 (Regional Jet Series 900) airplanes. AD 2015-17-04 required replacement of left and right fixed control rods and lever assemblies of the elevator control system. This AD adds a detailed visual inspection of the key washers and self-locking nuts of the elevator control linkages and corrective actions if necessary. This AD was prompted by reports of a disconnect between the elevator lever and control rod and a report indicating that certain revisions of the service information were missing instructions for proper installation of certain key washers. We are issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; Widebody Customer Response Center North America toll-free phone: 1-866-538-1247 or direct-dial phone: 1-514-855-2999; fax: 514-855-7401; email: ac.yul@aero.bombardier.com; Internet: <http://www.bombardier.com>. You may view this referenced service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0399.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0399; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the regulatory evaluation, any comments received, and other information. The address for Docket Operations (phone: 800-647-5527) is Docket Operations, U.S. Department of Transportation, Docket

Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Cesar Gomez, Aerospace Engineer, Airframe and Mechanical Systems Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: 516-228-7318; fax: 516-794-5531.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2015-17-04, Amendment 39-18237 (80 FR 50556, August 20, 2015) (“AD 2015-17-04”). AD 2015-17-04 applied to certain Bombardier, Inc., Model CL-600-2C10 (Regional Jet Series 700, 701, & 702), Model CL-600-2D15 (Regional Jet Series 705), and Model CL-600-2D24 (Regional Jet Series 900) airplanes. The NPRM published in the Federal Register on May 11, 2018 (83 FR 21966). The NPRM was prompted by reports of a disconnect between the elevator lever and control rod and a report indicating that certain revisions of the service information were missing instructions for proper installation of the key washers having part number BA698-93726-3. The NPRM proposed to continue to require replacement of left and right fixed control rods and lever assemblies of the elevator control system. The NPRM also proposed to require a detailed visual inspection of the key washers and self-locking nuts of the elevator control linkages and corrective actions if necessary. We are issuing this AD to prevent a disconnect between the elevator lever and control rod, which could lead to uncommanded elevator movement of the associated control surface, a large

difference between the position of the left and the right elevator control surfaces, and consequent reduced controllability of the airplane and degradation of the structural integrity of the horizontal stabilizer.

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian AD CF-2014-44R1, dated October 6, 2017 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain Bombardier, Inc., Model CL-600-2C10 (Regional Jet Series 700, 701, & 702), Model CL-600-2D15 (Regional Jet Series 705), and Model CL-600-2D24 (Regional Jet Series 900) airplanes. The MCAI states:

During an engineering review of the Elevator Control system, it was discovered that a disconnect between the elevator lever and control rod could lead to an uncommanded elevator movement of the associated control surface. This uncommanded movement may cause a large difference between the position of the left and the right elevator control surface resulting in reduced controllability of the aeroplane and compromised structural integrity of the horizontal stabilizer.

This [Canadian] AD mandates the replacement of the existing elevator lever assemblies and control rods with newly designed ones, which will prevent a disconnect between the components of the elevator control system should a failure occur.

Revision 1 of this [Canadian] AD is issued to require operators, * * * [regardless of previously accomplished actions], to perform a detailed visual inspection for the correct installation of the tab key washers and to re-torque the nut(s) [and corrective actions that include bending one tab of the key washer on a flat surface of the self-locking nut] if the tab key washer(s) does not have one tab bent on a flat surface of the self-locking nut.

You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0399.

Comments

We gave the public the opportunity to participate in developing this final rule. The following presents the comments received on the NPRM and the FAA's response to each comment. The Air Line Pilots Association, International (ALPA) reviewed and expressed support for the NPRM.

Request To Clarify Required Actions in Paragraph (h) of the Proposed AD

Endeavor Air and SkyWest Airlines requested that we clarify paragraph (h) of the proposed AD to specify Part B of the Accomplishment Instructions of Bombardier Service Bulletin 670BA-27-062, Revision E, dated June 8, 2017. The commenters pointed out that the Accomplishment Instructions are divided into two parts, Part A and Part B. The commenters also mentioned that Part A of the Accomplishment Instructions contains modification procedures (specified in paragraph (g) of the proposed AD) and Part B contains inspection requirements (specified in paragraph (h) of the proposed AD).

We agree to clarify as suggested by the commenter and have revised paragraphs (g) and (h) of this AD accordingly.

Request To Clarify Credit for Actions Accomplished Using Bombardier Service Non-Incorporated Engineering Order (SNIEO)

Endeavor Air requested that we clarify paragraph (i)(2) of the proposed AD to state that Bombardier SNIEO KBA670-93707 S02, dated July 21, 2015, can be accomplished concurrently or subsequently with the service information specified in paragraph (i)(2)(i) or (i)(2)(ii) of the proposed AD. The commenter pointed out that the

level of safety is equivalent if the actions specified in Bombardier SNIEO KBA670-93707 S02, dated July 21, 2015, are accomplished subsequently to the actions specified in the service information specified in paragraph (i)(2)(i) or (i)(2)(ii) of the proposed AD.

We agree with the commenter for the reasons provided and have revised paragraph (i)(2) of this AD accordingly.

Request To Provide Credit for Actions Previously Accomplished

Endeavor Air requested that we provide credit for accomplishing the actions specified in paragraph (h) of the proposed AD prior to the effective date of this AD in accordance with Part B of the Accomplishment Instructions of Bombardier Service Bulletin 670BA-27-062, Revision E, dated June 8, 2017.

We acknowledge the commenter's requests and agree to clarify. Paragraph (f) of this AD states to accomplish the required actions within the compliance times specified, "unless already done." Therefore, if operators have accomplished the actions required for compliance with this AD before the effective date of this AD, no further action is necessary. We have not revised this AD in this regard.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this final rule with the changes described previously and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this final rule.

Related Service Information under 1 CFR part 51

Bombardier, Inc., has issued Service Bulletin 670BA-27-062, Revision E, dated June 8, 2017. This service information describes procedures for replacing the elevator lever assemblies and control rods, and a detailed visual inspection of the key washers and self-locking nuts of the elevator control linkages and corrective actions, which include bending the tab of the key washers and re-torquing the self-locking nuts.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

We estimate that this AD affects 549 airplanes of U.S. registry. We estimate the following costs to comply with this AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Replacement of fixed control rods and lever assemblies (retained actions from AD 2015-17-04)	14 work-hours X \$85 per hour = \$1,190	\$6,712	\$7,902	\$4,338,198
Detailed visual inspection of the key washers and self-locking nuts (new action)	3 work-hours X \$85 per hour = \$255	\$0	\$255	\$139,995

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes to the Director of the System Oversight Division.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by removing Airworthiness Directive (AD) 2015-17-04, Amendment 39-18237 (80 FR 50556, August 20, 2015), and adding the following new AD:

2018-19-12 Bombardier, Inc.: Amendment 39-19412; Docket No. FAA-2018-0399; Product Identifier 2018-NM-008-AD.

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD replaces AD 2015-17-04, Amendment 39-18237 (80 FR 50556, August 20, 2015) (“AD 2015-17-04”).

(c) Applicability

This AD applies to the airplanes identified in paragraphs (c)(1) and (c)(2) of this AD, certificated in any category.

(1) Bombardier, Inc., Model CL-600-2C10 (Regional Jet Series 700, 701, & 702) airplanes, serial numbers 10002 through 10337 inclusive.

(2) Bombardier, Inc., Model CL-600-2D15 (Regional Jet Series 705) airplanes and Model CL-600-2D24 (Regional Jet Series 900) airplanes, serial numbers 15001 through 15298 inclusive.

(d) Subject

Air Transport Association (ATA) of America Code 27, Flight controls.

(e) Reason

This AD was prompted by reports of a disconnect between the elevator lever and control rod and a report indicating that certain revisions of the service information were missing instructions for proper installation of the key washers having part number BA698-93726-3. We are issuing this AD to prevent a disconnect between the elevator lever and control rod, which could lead to uncommanded elevator movement of the associated control surface, a large difference between the position of the left and the right elevator control surfaces, and consequent reduced controllability of the airplane and degradation of the structural integrity of the horizontal stabilizer.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Retained Replacement of Elevator Lever Assemblies and Control Rods, With Revised Service Information

This paragraph restates the requirements of paragraph (g) of AD 2015-17-04, with revised service information. Within 9,200 flight hours or 5 years, whichever occurs first, after September 24, 2015 (the effective date of AD 2015-17-04): Replace the left and

right fixed control rods and lever assemblies of the elevator control system with newly designed control rods and lever assemblies, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 670BA-27-062, Revision C, dated February 13, 2015; or Part A of the Accomplishment Instructions of Bombardier Service Bulletin 670BA-27-062, Revision E, dated June 8, 2017. After the effective date of this AD, only Part A of the Accomplishment Instructions of Bombardier Service Bulletin 670BA-27-062, Revision E, dated June 8, 2017, may be used.

(h) New Requirement of This AD: Detailed Visual Inspection and Corrective Actions

Within 8,800 flight hours after the effective date of this AD, do a detailed visual inspection of the key washers and self-locking nuts of the elevator control linkages, and do all applicable corrective actions, in accordance with Part B of the Accomplishment Instructions of Bombardier Service Bulletin 670BA-27-062, Revision E, dated June 8, 2017. Do all applicable corrective actions before further flight.

(i) Credit for Previous Actions

(1) This paragraph provides credit for actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Bombardier Service Bulletin 670BA-27-062, dated December 12, 2013; Bombardier Service Bulletin 670BA-27-062, Revision A, dated April 1, 2014; Bombardier Service Bulletin 670BA-27-062, Revision B, dated October 10, 2014; or Bombardier Service Bulletin 670BA-27-062, Revision D, dated December 1, 2015. This service information is not incorporated by reference in this AD.

(2) This paragraph provides credit for actions required by paragraph (h) of this AD, if those actions were performed before the effective date of this AD using the service information specified in paragraph (i)(2)(i) or (i)(2)(ii) of this AD, provided Bombardier Service Non-Incorporated Engineering Order (SNIEO) KBA670-93707 S02, dated July 21, 2015, was done concurrently with or subsequently to the service information specified in paragraph (i)(2)(i) or (i)(2)(ii) of this AD.

(i) Bombardier Service Bulletin 670BA-27-062, dated December 12, 2013; Bombardier Service Bulletin 670BA-27-062, Revision A, dated April 1, 2014; or Bombardier Service Bulletin 670BA-27-062, Revision B, dated October 10, 2014. This service information is not incorporated by reference in this AD.

(ii) Bombardier Service Bulletin 670BA-27-062, Revision C, dated February 13, 2015. This service information was previously incorporated by reference in AD 2015-17-04.

(3) This paragraph provides credit for actions required by paragraph (h) of this AD, if those actions were performed before the effective date of this AD using Bombardier Service Bulletin 670BA-27-062, Revision D, dated December 1, 2015. This service information is not incorporated by reference in this AD.

(j) Other FAA AD Provisions

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, New York ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If

sending information directly to the manager of the certification office, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: 516-228-7300; fax: 516-794-5531.

(i) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(ii) AMOCs approved previously for AD 2015-17-04, are approved as AMOCs for the corresponding provisions of this AD.

(2) *Contacting the Manufacturer*: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, New York ACO Branch, FAA; or Transport Canada Civil Aviation (TCCA); or Bombardier, Inc.'s TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

(k) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian AD CF-2014-44R1, dated October 6, 2017, for related information. This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0399.

(2) For more information about this AD, contact Cesar Gomez, Aerospace Engineer, Airframe and Mechanical Systems Section, FAA, New York ACO Branch,

1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: 516-228-7318;
fax: 516-794-5531.

(3) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (l)(4) and (l)(5) of this AD.

(l) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(3) The following service information was approved for IBR on [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(i) Bombardier Service Bulletin 670BA-27-062, Revision E, dated June 8, 2017.

(ii) Reserved.

(4) For Bombardier, Inc. service information identified in this AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; Widebody Customer Response Center North America toll-free phone: 1-866-538-1247 or direct-dial phone: 1-514-855-2999; fax: 514-855-7401; email: ac.yul@aero.bombardier.com; Internet: <http://www.bombardier.com>.

(5) You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(6) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:
<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Des Moines, Washington, on September 7, 2018.

Michael Kaszycki,
Acting Director,
System Oversight Division,
Aircraft Certification Service.

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